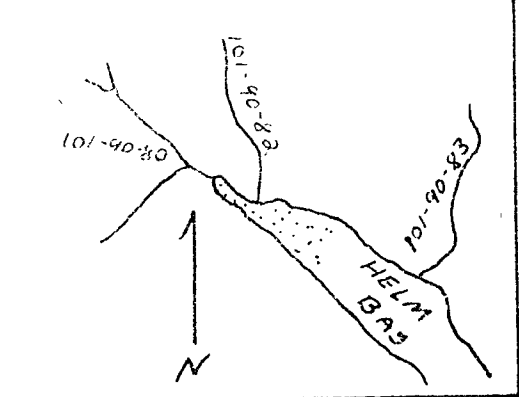
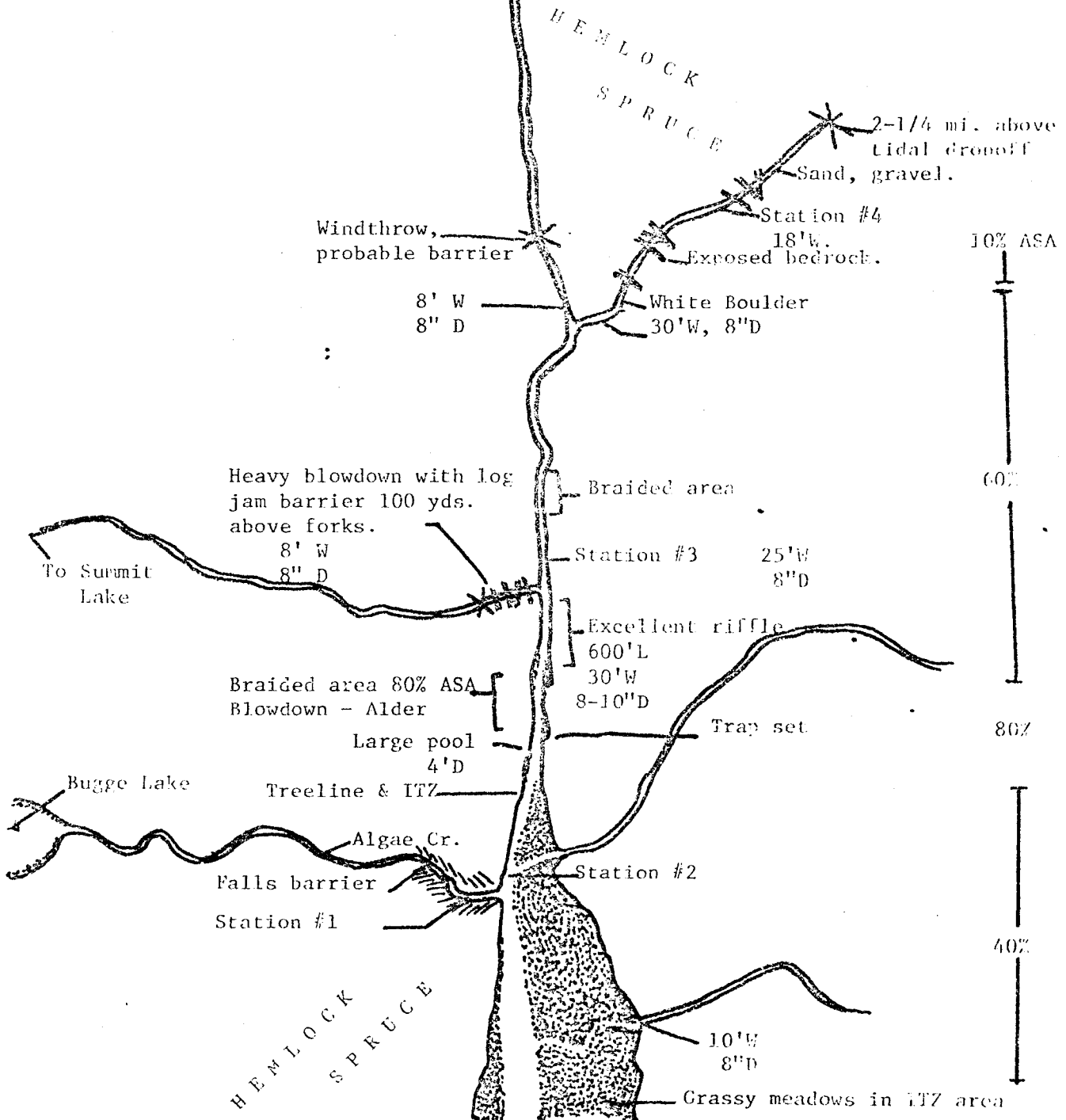


Helm Bay - Head
 101-90-80
 Novak, Jones
 6-10-75

101-90-10800



Light brown coloration



14 fathoms

Name Helm Bay Head Catalog No. 101-90-80
Latitude N 55° 40' 23" 59" WR No. 54
Longitude W 132° 01' 06" K No. 59
Geodetic Map No. Craig C-1 Work Area Ketchikan
Location Helm Bay - Cleveland Penn. Watershed Length 1.5 miles
Drainage Area of Watershed 8 sq. miles (polar planimeter)
Water Supply Type Lakes fed by ground water and precipitation.

Trails & Survey Routes F&WS established trail to Bugge Lake and Summit Lake.
Survey stream by walking in bed.

Aerial Survey Notes Light brown color of water with dark substrate impede aerial surveying. Canopy conditions present on most of stream.

Anchorage 1 mile from head of bay in 50-60'. Subject to southeast winds. Bottom - sand and mud.

Tide Stage When Surveyed 1st half of flood.

FISHERY RESOURCES

Commercial Fisheries pink, chum and coho

Escapement high historic - pink 28,000 (1940), chum 10,000 (1941), coho 500 (1941).

Spawning Area: 11,588 m² (9240'x27'x50% ASA)

Species Composition Estimate - 90% pink, 5% chum, 5% coho

Timing Late - September, October.

Schooling areas Pools in the upper intertidal zone and pools above the ITZ.

Shellfish Potential Excellent dungeness crab found off the intertidal area of the head (14 fathoms). Clam potential good.

Sport Fisheries Cutthroat, Dolly Varden, coho, pink, chum with possible halibut fishery at head during salmon runs.

Land Use at Present Several cabins in Helm Bay provide high recreational use during entire year. Mining interests in Helm Bay.

History of Land Use Gold mining was very active in the area. Hand logging occurred on most streams in Helm Bay.

Rehabilitation Potential Future removal of windfall across stream may be necessary to retain open fish passage.

Soils Stable conditions on the main system but V-notch situations exist on the first tributary system on the left in ITZ.

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	2
	Number of droppings	2
Geese -----	Number seen on tide flats	2
	Number seen up creek	0
	Number of broods seen	0
Mallards ---	Number seen on tide flats	0
	Number seen up creek	0
	Number of broods seen	0
Mergansers -	Number of broods seen	0
Bald Eagles-	Number seen along creek	1
	Number of nests seen and location	0
Seals -----	Number seen at mouth of stream	0
Tide flats -	Estimate length along beach	1 mile
	Estimate depth out from beach	200 yds.
	Eel grass present on what percent of flats	2%

PEAK ESCAPEMENT RECORD

Helm Bay Head
101-90-80

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
9-17-30	3,300			
9-28-37				Stream well seeded. 35% chum, 65% pink.
9-1-38				1000 pink off mouth.
9-23-40	28,000	2,000		Excellent.
9-19-41	15,000	10,000	500 coho	
9-8-42				1000 fish off mouth.
10-15-46				Good.
9-5-47				Scattered groups of pinks in stream.
10-22-48	500			
9-19-49	2,000			
9-14-53	1,400	1		
9-13-55	900	100		1000 at mouth.
8-25-60				None observed.
8-16-63	900 schoolled			Visibility good.
8-20-64	400	few		100 @ mouth. Vis. fair, stream high and dark.
8-23-65				150 I.T. Vis. good off mouth.
7-31-69				Fair visibility. None observed.
8-25-70	500			1000 in I.T. Schools in bay.
8-9-71				500 - 1 ball. Visibility fair.
8-16-72				3000 @ mouth, I.T.
8-15-73	2,000			500 I.T.
8-12-74				1000 salmon I.T.
8-13-75	500+			5000 @ mouth & I.T. Vis. poor.
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